

FLIGHT

First Aero Weekly in the World.

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport.

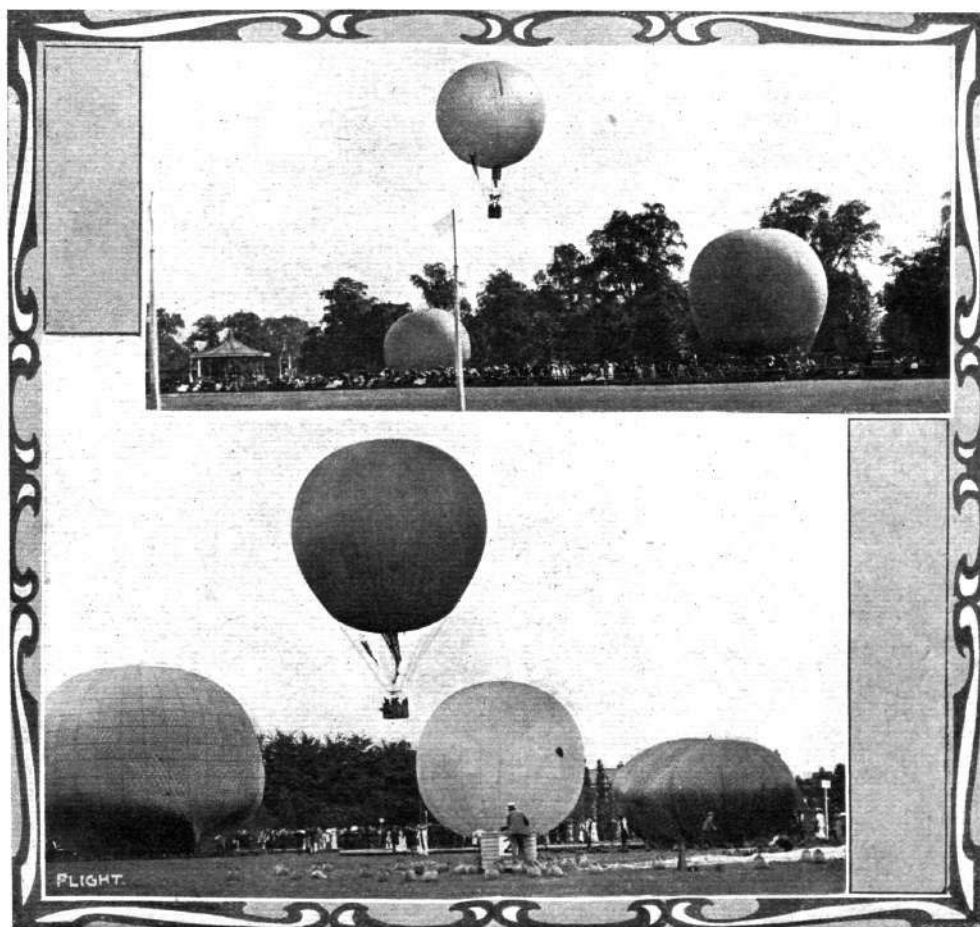
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THE HEDGES BUTLER CHALLENGE CUP FOR BALLOONS.—Below, just away, the Hon. Mrs. Assheton-Harbord's "Nirvana," piloted by Mr. C. F. Pollock, which landed at the most distant point; and, above, Major Sir A. Bannerman's "Uranus" well over the belt of Hurlingham's trees.

NEXT YEAR'S 1,000-MILE TRIAL.

As announced in the *Daily Mail* on Tuesday last, the second £10,000 prize which has been offered by them for the further encouragement of flight in the United Kingdom, is to be striven for in July next year during a week to be set apart specially for the purpose, and is to take the form of a trip of no less than a thousand miles extending over the greater part of Great Britain. As our readers will remember, numerous suggestions have been advanced, since the proprietors of the *Daily Mail* notified their intention of offering this second magnificent prize, concerning the fresh conditions that might most advantageously be imposed for this new competition. But good as many of those ideas undoubtedly were—and we ourselves were responsible for one amongst the many—it will, we think, be generally conceded that the 1,000 mile flight now decided upon is quite the best form that the contest could possibly take when everything is taken into account and when all its various aspects come to be realised.

Although at first sight the conditions laid down might be thought to differ chiefly only as regards distance traversed from, say, the London to Manchester flight of this year, yet in reality several entirely new features have been introduced that it will take all the time of makers and aviators to satisfy and which they at least will not be slow to recognise. A specific date is, for instance, laid down for the prize to be competed upon, instead of any time that may suit the convenience of the aviator being still open to him to make his attempt. There is, too, a specified "circular" route, the traversing of which is sure, when the full regulations come to be issued, to be rendered somewhat arduous in numerous relatively minor details; and, further than this, there are specified landing places where the machines must be brought down to earth. And, above all, there is a very vast difference between a thousand miles covered within a week, and a single London-Manchester trip.

It is only necessary to cast the mind back ten years and a few months in order to recollect what a thousand mile trial of very much the same kind meant to the automobile, and what this trial may therefore mean to the flying machine. The 1900 event to which we refer proved to be the turning point in the fortunes of the automobile industry, since before then the prospects of the movement in England were far from encouraging, and yet within a very short time indeed the inhabitants of Great Britain became considerably the best customers for motor vehicles with the factories that had been established on the Continent and in America as well as with the few that had come into existence at home. Looking back at that event, and at the astounding progress of the ensuing decade, it is perhaps possible to imagine in some slight measure as compared with what may well be the actuality, the significance of next year's flight from London on an easterly course northwards up into Scotland, and then down the west coast and across along the south coast with the finish once more (as shown in our map elsewhere) through Tunbridge Wells back to the Metropolis. What the big event was for the automobile in 1900, this extraordinary circular flight of 1911 may well eclipse a hundredfold. At any rate, it augurs well that, just as at the earlier date it was Alfred Harmsworth who was mainly instrumental in ensuring the "sinews of war" for enabling the national automobile club to carry out its programme, so now it is Lord Northcliffe and his

Daily Mail colleagues who are similarly co-operating with the Royal Aero Club, and preparing for an event that is bound for all time to stand out pre-eminently as an "airmark" in history.

Congratulations are due to the *Daily Mail* and to their advisors, the Club, for their wisdom in announcing the general nature of this fresh event in ample time to enable manufacturers and flying men to make all their necessary preparations well in advance, and yet in withholding all such minor details as will leave the organisers perfectly free to suit such requirements as may well arise between the present time and a full year hence. As a result of this thoroughness, it will doubtless be possible to have set aside the second week in July next year—provisionally selected—or an equally suitable period by the International Federation, and hence the full measure of importance that the event deserves is assured to it from the very first. Needless to say, apart from anything else this is all to the good of this country, since, at any rate for one week in the year, all eyes throughout the civilised world will be focussed on British aviation, and the due importance of the industry in this country cannot but be greatly emphasised thereby. We feel convinced on balance, moreover, it is satisfactory that the event is to be open to aviators of any nationality, and to machines that are built in any part of the world. This fact at least enhances enormously the worldwide importance of the week in question, and certainly means that if a British win is scored that win will be worth infinitely more than if foreigners were debarred from taking any part. After all said and done, it must be remembered that British flying men and British aeroplane builders have got to be able to hold their own with those of any other land, while at any rate they possess certain natural advantages over all others, through the mere fact that this trial takes place over country with which they should be more familiar than their rivals.

Next year's 1,000 mile trial unquestionably ought to be won by a British airman flying on a British-made machine. It is just all that goes to prepare for such a victory which the *Daily Mail* enterprise is intended to encourage and which it ought to produce. We for our own part should be frankly very disappointed if such does not prove to be the outcome of this important race, even though hitherto we have not felt anything like the same about the epoch-making events that have already taken place. There was no reason why an American or a Frenchman should not lead the way when it was largely a toss-up as to whether that individual was born in England, in America or in France. But now that matters have passed the individual stage, and that competition is between community and community, it begins to be a matter of all-importance to the British, that their own representative should assume and maintain an honourable lead at any rate on British soil. As regards next year's big event, it must of course also be recognised that even if a foreigner should come off triumphant, yet the British industry would still benefit very greatly indeed by the demonstration made to its own people, and by the mere fact that British gold and British enterprise had had the effect of forcing forward universal progress by one very big step. From every point of view, therefore, the *Daily Mail* is once more deserving very well indeed of humanity at large and of the people of this country in particular.

WOLVERHAMPTON AVIATION MEETING. FIRST ALL-BRITISH FLIGHT MEETING.

UNSTINTED credit is unquestionably due to the promoters of the Wolverhampton flying week for having so splendidly organised the first national meeting confined to British aviators. That

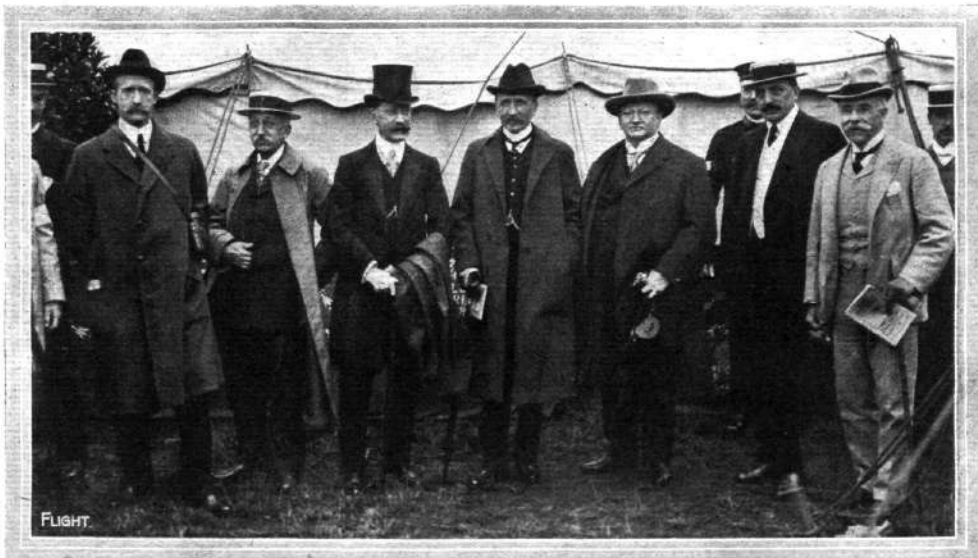
Unfortunately the opening weather was hardly as propitious as might have been wished, but before the week is out, with the dozen or more of flyers ready to give practical proof of their achievements



SOME OF THE WOLVERHAMPTON AVIATORS.—Reading from left to right—Messrs. C. Lane, Graham Gilmour, Claude Grahame-White, Astley, Spottiswoode (Mr. Boyle's Manager), J. Radley, Lieut. Gibbs, Hon. Alan Boyle.

unqualified success may attend their efforts must be the sincere wish of all those concerned in the future of aviation in this country. In any case one great object will have been achieved, the demonstration

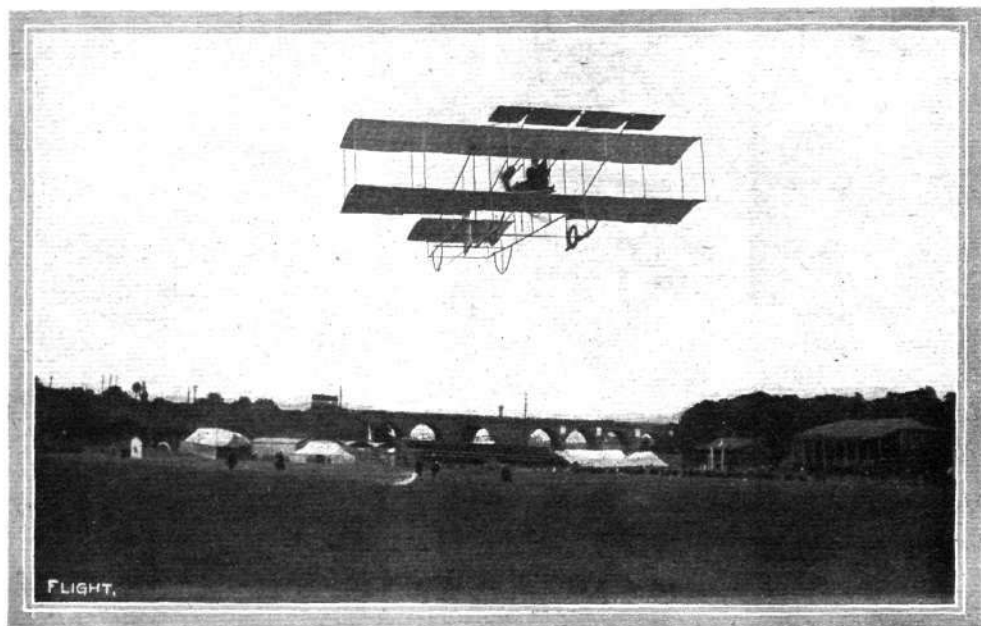
in the art of aviation, a very different tale to the early short flights will doubtless be recorded. Wisely, as a preliminary, the officials determined, in sympathy with Royal Aero Club rules, that no aviator



WOLVERHAMPTON FLIGHT MEETING.—Some officials and supporters. From left to right—Sir Richard Paget, Mr. Staveley Hill, M.P., the Mayor of Wolverhampton, the Earl of Plymouth, the Mayor of Birmingham, —, and Mr. Bird, M.P.

that there is a new live industry, even at these early days, to be fostered for the Midland and other manufacturers, who have so well maintained their lead, once obtained, in the sister industry of motor vehicles.

should take part in the flying except those who held pilot certificates, or who were able to satisfy the authorities of their ability to fly without danger to themselves or the public. In this way several promising men had to be ruled out by the Judges—Sir Richard Paget



WOLVERHAMPTON FLIGHT MEETING.—General view of the aerodrome looking towards the hangars, Mr. Cecil Grace in flight on his Short biplane.

and Capt. Cooke—including Mr. Granville Bradshaw, designer of the Star machine, Mr. Holder, of Edgbaston, and Mr. Harthill, of Wolverhampton. Capt. Dawes was more fortunate, and duly passed the ordeal, he twice going round the Dunstall Park course, to the delight of the public onlookers. No doubt some of these would have got through, but the time limit—Friday evening, June 24th—was against them. This is the more unfortunate as practically all the Midland men were thereby eliminated, and the Humber machines thus left entirely in the hands of Mr. G. Barnes.

During the practising last week some slight mishaps were experienced, but nothing serious or of a nature to affect the meeting.

The meeting was officially inaugurated by a luncheon on Monday, at which the Earl of Plymouth presided. By three o'clock, some thousands of people thronged the enclosures, but the weather was very gusty, and the prospects for flying did not look very bright. Several of the competitors, however, brought out their machines, and Grahame-White, accompanied by a passenger, made several long hops along the ground. Barnes was the next to take the air, and on the Humber monoplane, covered half the course, the machine returning to its shed under its own power. The Hon. Alan Boyle also made a short flight, as also did Mr. L. D. Gibbs on his Sommer biplane. Unfortunately, the latter landed on some rough ground in the centre, and damaged one of the skids of the machine. The best flight of the day was by Mr. Cecil Grace on the new Short machine. He rose high and flew round the ground above the trees, a performance which was loudly applauded by the crowd. On his descent Mr. Grahame-White made another half circuit, and then Mr. Radley flew for some distance on his Blériot. After a long delay, during which the wind showed no sign of moderation, Mr. Grahame-White twice went round the ground but kept his machine very low. A little later Mr. Rawlinson brought out his Henry Farman biplane, and although his trial was short it was a good one. It will thus be seen that although there was nothing remarkable done on the opening day enough was seen to demonstrate the abilities of a large number of British aviators, even when handicapped by such adverse weather conditions.

On Tuesday the aviators were astir early, Mr. Ogilvie paying a visit to the ground at four o'clock, when he was able to make a short trial on his Short-Wright machine. In landing one of the skids was fractured, and so further practice had to be suspended. Unfortunately as the day wore on the wind increased in strength, and so the few visitors who went to the flying ground had to content themselves with inspecting the various machines in their sheds. At

six o'clock the white flag, suggesting that flights might be made, was hoisted, but luck was out, and the wind proved master.

On Wednesday the weather became calm after the morning, and Mr. Cecil Grace, on his E.N.V.-engined Short biplane, again made the best performance. Just before 8 p.m. Mr. Rawlinson and Mr. Grahame-White were competing for the duration prize when Mr. Grace went up, and rising well above them he flew in wide circles for 27 mins. 45 secs. Mr. Rawlinson's effort ended in 7 mins. 10 secs., while Mr. Grahame-White came down after 15 mins. 38 secs. Mr. Rawlinson was in the air first, rising to a height of 100 ft. He was followed by Mr. Grahame-White, who went 50 ft. higher, while Mr. Grace went up to 500 ft. At the end he descended to 150 ft., and then planed gracefully to the ground. The afternoon was occupied by the Quick-Starting Competition, in which the first prize of £100 fell to Mr. Cockburn. The white flag indicating that flights were possible was hoisted at 2 o'clock, and at 3 o'clock the proceedings were opened by Mr. Radley on his Blériot, who got off in 10½ secs., but failed to make the necessary subsequent flight of 200 yards afterwards. He was followed by Gibbs (Sommer), Cockburn (Farman), Rawlinson (Farman), Barnes (Humber), Grahame-White (Farman), and Boyle (Avis). Mr. Cockburn got up in 9 secs., and so did Mr. Rawlinson, but this time was bettered by Mr. Grahame-White, who only took 6 secs. Each one was allowed three attempts, and most of the second tries were improvements on the first, Mr. Gibbs being best with 5 secs., but his distance was 105 ft. 4 ins., and Mr. Grahame-White was only ¾ sec. slower for 101 ft. 7 ins. Mr. Cockburn did not improve the second time, but at the third attempt he was up in 4½ secs., the distance being 100 ft. 5 ins., a new British record. Unfortunately, in landing, the propeller and one wing of the machine were damaged, but this was quickly repaired. Grahame-White's third rise was 107 ft. in 5½ secs. In addition to the flights already mentioned, during the evening the Hon. C. S. Rolls was out for 1 min. 53 secs., Mr. Radley for 1 min. 34 secs., and Capt. Dawes and Mr. Barnes for 2 mins. each.

For the cross-country flight, which forms part of the programme, starting from the aerodrome the competitors will go to Albrighton, then to the Cosford waterworks, rounding the Tettenhall chimney stack there by the west side, and then back to the Dunstall Park ground, a distance of 21 miles. This should help to maintain special interest in the remainder of the week's programme, when with a change in the boisterous weather some more lengthy flights may be confidently looked for.

THE SECOND "DAILY MAIL" £10,000 PRIZE.

IN view of the desire of those responsible for the offering of the second big *Daily Mail* prize—that the winning of it should mark a distinct step forward in the art of aviation—it has taken some little time to devise a suitable competition. In consultation with the Committee of the Royal Aero Club, it has now been decided that the contest shall take the form of a 1,000 miles tour round England, and on Tuesday the provisional conditions were announced by our contemporary, as follows:—

"Under the rules of the *Fédération Aéronautique Internationale*, represented by the Royal Aero Club of the United Kingdom.

"Open to the whole world.

"With a view further to encourage aviation, the *Daily Mail* offer a prize of £10,000, to be competed for during the second week of July, 1911 (weather permitting).

"The winner will be the competitor who, starting from a fixed point near London, completes the prescribed circuit in the shortest time.

"The course has been provisionally fixed as follows:—

Table of Distances.

	Miles.
London to Harrogate	182
Harrogate to Newcastle	68
Newcastle to Edinburgh	93
Edinburgh to Stirling	31
Stirling to Glasgow	22
Glasgow to Carlisle	86
Carlisle to Manchester	103
Manchester to Bristol	141
Bristol to Exeter	65
Exeter to Newport (I. of W.)	98
Newport to Brighton	52
Brighton to Tunbridge Wells	28
Tunbridge Wells to London	31
Total	1,000



"DAILY MAIL" SECOND £10,000 PRIZE FOR FLYING.—Sketch map from the "*Daily Mail*" showing the "all-round Britain" route of the 1,000 miles course provisionally selected.

"Each town marked with a circle on the map will be a control, and competitors must alight at a given spot within the control."

"The full particulars and conditions of the race will be published at a later date."

By permission of the *Daily Mail* we are able to reproduce the map on a reduced scale published by them, showing the proposed course, and we also refer to the matter editorially on page 496.

AUTOMOBILE CLUB OF FRANCE "GRAND PRIX D'AVIATION."

THE long-promised big prize of the A.C. of France has now materialised, and the regulations were issued officially at the end of last week. Broadly they comprise two big events, viz. (a) for heavier-than-air machines, Paris-Brussels and back, a distance of 530 kiloms. as the crow flies, the prizes for this journey being 100,000 frs. for the winner, 30,000 frs. for the second, and 20,000 frs. for the third. (b) For dirigibles the Grand Prize is 50,000 frs. for the winner, and the course Paris to Rheims and back.

The munificent prizes being international tend thereby to further help forward progress in the navigation of the air for the whole world. The detailed regulations are as follows:—

Grand Prize for Heavier-than-Air Machines.

1. A sum of 150,000 frs. is allocated by the A.C. de France for a course, Paris-Brussels and return, to be covered by an aeroplane (flying machine classed B in the regulations of the Commission Sportif Aeronautique) under the following conditions:—

2. The prize will be divided between the three pilots who shall have covered in the best times before January 1st, 1911, the course of Paris to Brussels and back, carrying a passenger (two persons including the pilot), the two passengers weighing altogether 150 kilogs., or an equivalent weight made up of non-consumable ballast, but neither passenger must be represented entirely by ballast. The total time occupied in the journey must not in any case exceed 36 hours. This prize may be competed for as from the promulgation of the present rules.

3. The start and finish must be made from Issy-les-Moulineaux Plain, and must be controlled by a commissaire and a timekeeper, the responsibility for the presence of whom rests with the competing pilot.

4. One descent only is obligatory. This must be made at Brussels in the Eterberck Plain, and must be controlled by a commissaire jointly with a timekeeper, who must be associated with a qualified club in Belgium, the pilot again being responsible for their presence. The length of the stay is left to the discretion of the pilot, but in any case a maximum time of 3 hours will be allowed to each competitor. That is to say, the time of stay at Brussels will be deducted from the total time of the journey if it be less than or equal to 3 hours.

5. The machines will be "sealed" before starting in all their essential parts. These seals must be found intact at the descent at Brussels and at the finish of the journey at Issy.

6. The division of the 150,000 frs. will be made as follows:—100,000 frs. to the pilot aviator who makes the best time under the present conditions, 30,000 frs. to the pilot aviator making the second best time, 20,000 frs. to the pilot aviator making the third best time.

7. These prizes will be allocated under the conditions specified in the rules of the F.A.I. and of the Commission Sportif Aeronautique, which alone are applicable in any case of dispute or omission. The competition is open to all pilots qualified by the F.A.I.

8. Entries will be received by the Secretary of the Commission Sportif of the Automobile Club of France, and must be lodged two clear days before the date of starting. Entries must be accompanied by a sum of 1,000 frs., which will be returned to starters. The type of machine and its principal characteristics must be mentioned at the time of entering. Each entry is good for one attempt only, which will be regarded as having been made by the competitor when he passes the boundary of the Issy Military Field of Manœuvres. Appliances judged to be necessary by the Commission Sportif of the A.C. de France must be carried by each competitor. Each machine must carry the distinctive badge of the A.C. de France, having on it a number indicating the time of the engagement.

9. All replenishments are authorised in the course of any landings, the same as during the obligatory landing at Brussels, but the towing of the apparatus at a speed in excess of that of a man walking is strictly forbidden.

The Grand Prix for Dirigibles.

1. A sum of 50,000 frs. is allocated by the A.C. de France for the course Paris-Rheims and back, to be carried out in a dirigible (Class A of the General Regulations of the Commission Sportif

Aeronautique), under the conditions indicated below. This prize may be competed for as from the promulgation of the present regulations.

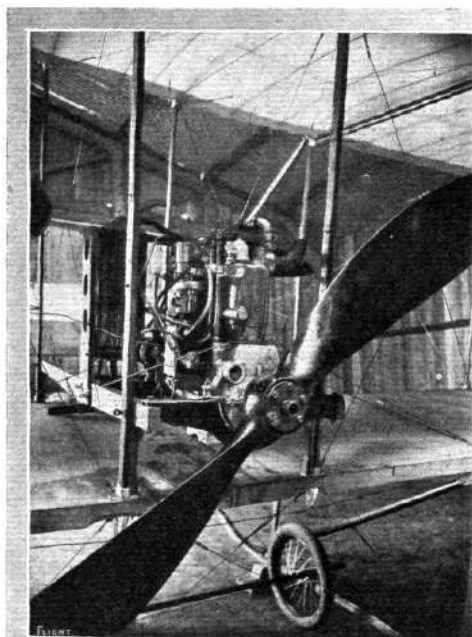
2. The prize will be awarded to the pilot who shall have effected the said course in the best time before January 1st, 1911.

3. The start and finish must be in the Military Manœuvring Field of Vincennes, and must be controlled by a commissaire jointly with a timekeeper, the responsibility for whose presence rests with the competing pilot.

4. Any number of descents are permitted, but one descent is obligatory, which must be made at Rheims (at the Cavalry Manœuvring Field), where the dirigible must embark a passenger of at least 75 kilogs. weight, any difference having to be made up by non-consumable ballast. The duration of the stay is left to the discretion of the pilot, but will count as part of the time of the race. The control of the obligatory descent must be taken by a commissaire jointly with a timekeeper, the responsibility for whose presence rests with the competing pilot.

5. This prize will be awarded under the conditions specified in the regulations of the F.A.I. and of the Commission Sportif Aeronautique, which are alone applicable in case of dispute or omission. The prize is open to all pilots qualified by the F.A.I.

The other formal rules in regard to carrying appliances and the club badge, are the same as for the heavier-than-air machines; also entries must be sent in the same manner as for the heavier-than-air, with the same fee of 1,000 frs., which will be returned to starters, and each entry covers only one attempt, which counts once the dirigible has passed the boundary of the Vincennes Military Field.



Mr. Roger Sommer's own biplane with which he made a successful flight at the Rheims Flying Grounds on June 13th. This remarkable machine, as will be noticed, is fitted with one of the Humber Co.'s 4-cyl. 45-h.p. motors.

BRITISH AVIATION MEETINGS.

Entries for Bournemouth.

AT a luncheon given by the Bournemouth Fêtes Committee, after a Press view of the flying grounds, &c., Councillor Bell announced that eighteen entries had been received for the meeting, fourteen of which were from British flying men. A special feature was that each and every one had paid the regular entrance fee of £40. The entrants are:—

BRITISH.
Mr. G. A. Barnes.
Capt. Bertram-Dickson.
Hon. Alan Boyle.
Mr. G. B. Cockburn.
Mr. S. F. Cody.
Mr. C. E. Colmore.
Mr. J. A. Drexel.
Mr. L. D. L. Gibbs.
Mr. Cecil A. Grace.
Mr. C. Grahame-White.

Mr. R. Jones.
Mr. J. Moore-Brabazon.
Mr. Alec Ogilvie.
Mr. A. Rawlinson.
Mr. J. Radley.
Hon. C. S. Rolls.

CONTINENTAL.
Audemars.
Christians.
Morane.
Wagner.

In addition to these, the Management Committee are considering the advisability of inviting Paulhan and Henry Farman to give demonstrations.

The Irish Meeting.

ALREADY the guarantee fund of £2,000 asked for in connection with the two days' flying meeting to be held on Aug. 29th and 30th at the Leopardstown racecourse has been more than subscribed, so that the meeting will certainly take place. It was originally intended to hold the meeting during the Horse Show week, but it was decided to be better that the events should not clash, and so the Monday and Tuesday of the following week were definitely chosen. Definite arrangements have also been made with Mr. Claude Grahame-White to fly on his Farman machine. Mr. Ferguson will give demonstrations on his monoplane, and it is hoped that Mr. Moore-Brabazon will consent to fly.

Lanark Meeting, August 6th to 13th.

THE plans of the flying course and erections have now been finally adjusted and approved by the committee. The flying "circuit," which is oval in shape, is immediately to the east of the Lanark Racecourse, and measures $1\frac{1}{2}$ miles round. The circuit is reached 1,100 yards after leaving the starting point, which is well-nigh the centre of the racecourse, so that in every event on the circuit the aviator will fly to reach it that distance on the straight, right in front of the various public enclosures. With a view to the safety of the spectators and the comfort of the flyers, the public enclosures are at no place nearer than 300 feet to the line of flight. To those

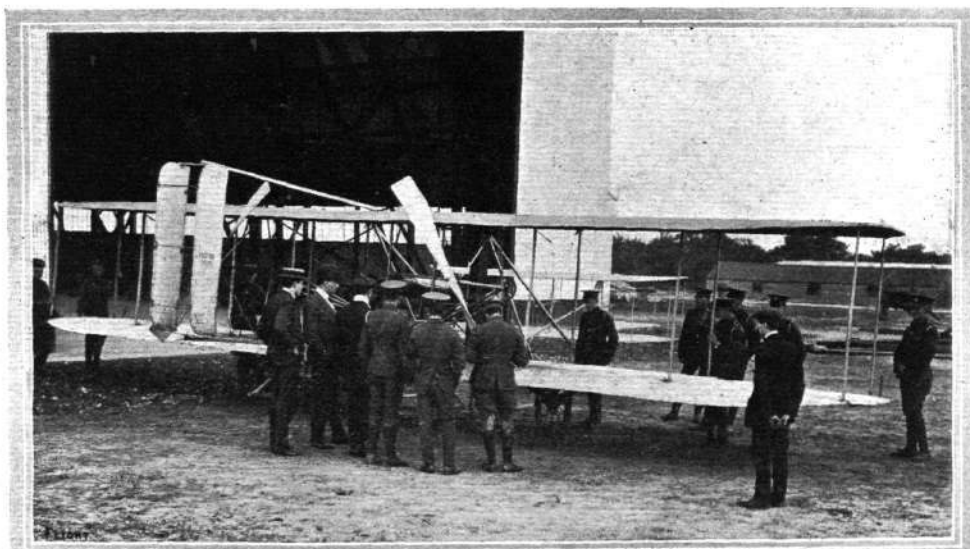
acquainted with the capacious Lanark Racecourse the statement that the circuit is about three times greater in area will give some idea of its extent. Over 100 men have been for weeks employed in levelling and improving it so as to render it as perfect for the purpose as is possible. These improvements will make the circuit easily visible to the spectator in the various enclosures, while all the starting, landing, the altitude, weight carrying, alighting, and other competitions which take place in the race enclosure will keep the interest constantly in the immediate forefront of the enclosures.

The plan of stands and enclosures shows that the most complete arrangements are being made for the comfort and convenience of the patrons of the meeting.

There are various enclosures, a ten shilling enclosure with a special entrance to the west end of the racecourse, containing the Race Company's permanent buildings and stands. A large grand stand providing about 2,000 reserved seats, several restaurants, and other conveniences have been erected. Immediately adjoining this to the east is the 5s. enclosure, also containing a grand stand of similar dimensions and a variety of restaurant and refreshment rooms. East of that again and extending for about one-third of a mile, is the general or 1s. enclosure, in the centre of which is a stand costing 2s. each person extra, and all feeding and other accommodation for the large number expected to use this part of the grounds. The interests of the democracy cannot be said to have been overlooked, for not only are they allocated a frontage of 500 or 600 yards, but they are apportioned a site which will command in a manner not in any degree inferior to the higher priced portions, a most intimate and at the same time comprehensive view of all the proceedings. East of the general enclosure is a motor stand fronting the flying course for about one-eighth of a mile, and affording accommodation for hundreds of cars. East of this again is a reserved enclosure, available only to those holding tickets for the 10s. stand. These various enclosures all front, in succession, the flying course for very nearly a mile.

The hangars, or aeroplane sheds, are at the west end of the racecourse at right angles to the enclosures, and are so placed that from almost any point a view will be had of the machines from the moment of their leaving their sheds.

The railway station in course of construction by the Caledonian Railway Company specially for this meeting is within a few hundred yards of the course, and a frequent service of special trains from the important populous centres to this point will be provided in addition to a constant service to the permanent station in the town—one mile distant. The plans give evidence of much careful thought on the part of the committee and architects, and show that everything is being done to secure the success of the meeting.



As announced last week, the Hon. C. S. Rolls has been giving helpful instruction to the officers at Aldershot in connection with the Wright biplane which has now its home there with the Army. Our picture shows Mr. Rolls (with the cap and muffler) explaining the working of the machine. Mr. Mervyn O'Gorman is standing to his left.

BRITISH NOTES OF THE WEEK.

Mr. Lane to Fly at Manchester.

THE Manchester Wheelers are a very enterprising body, and at one of their race meetings fourteen years ago introduced "Cottonopolis" to the motor car. Now they propose to do the same for the aeroplane, and have made an arrangement with Mr. Charles Lane to give demonstration flights on his monoplane at their race meeting, which is to be held on Saturday next at the M.A.C. grounds at Fallowfield.

Mr. Gilmour in Scotland.

LANARK had a foretaste on Saturday last of what is like to happen on August 6th-13th, as Mr. Graham Gilmour, on his Blériot monoplane, made a circular flight of about a mile at the fête promoted by the Territorial Engineers. As he was flying over the River Clyde his motor stopped, and Mr. Gilmour had to descend hurriedly, but he accomplished this successfully.

Coventry and a Flying Ground.

THE Coventry Aeronautical Society have been in communication with the Corporation regarding the provision of a flying ground. On being asked for suggestions, the Society pointed out that the ground should be at least half a mile square, and hinted that a portion of Hearsall Common and certain adjoining land near the Tile Hill Road might possibly be used for the purpose. It was eventually resolved by the Corporation, however, that the provision of an aviation ground was not a work which should properly be undertaken by the Corporation.

Flying in Canada.

ON Saturday last the first aviation meeting to be held in Canada commenced at Montreal. The most successful flights were made by M. Jacques de Lesseps, who recently flew across the Channel, on a Blériot, and Mr. Walter Brookins, on his Wright. Mr. A. McCurdy on the Baddeck biplane and Midgeon on a Blériot also were out, but met with mishaps.

To Commemorate the Hon. C. S. Rolls' Flight.

IT having been suggested by several people that a fitting memorial should be erected on the spot from which the Hon. C. S. Rolls started and returned on his aerial voyage to Calais and back, the Mayor of Dover, Mr. Walter Emden, has taken the matter up. He asks all those who are interested in the matter to communicate with him at the Town Hall, Dover, where subscriptions may also be sent.

Honouring C. S. Rolls.

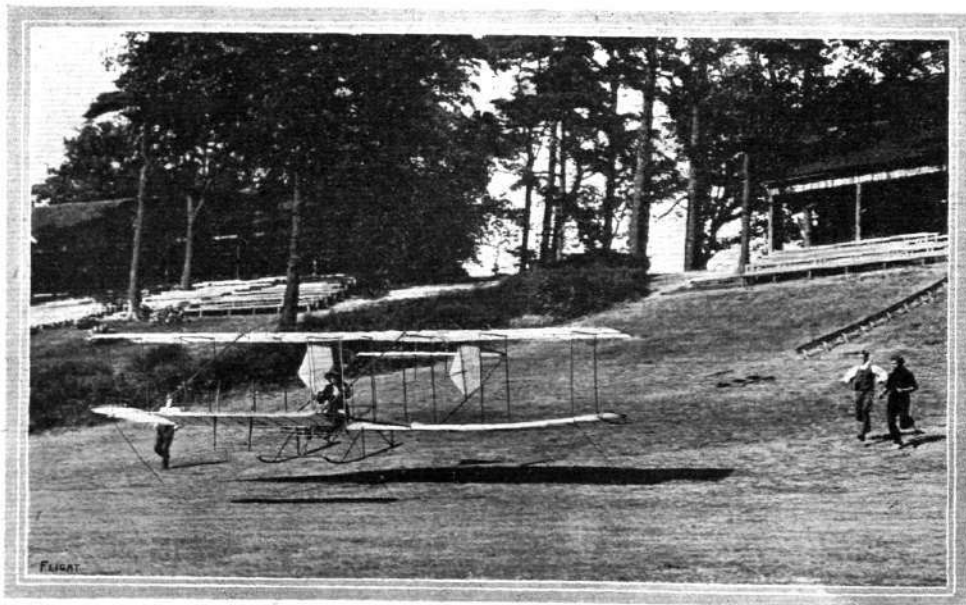
BROTHER officers of the Army Motor Reserve entertained the Hon. C. S. Rolls at dinner at the Imperial Restaurant on the 23rd ult., and presented him with a rose bowl as a mark of their appreciation of his flight across the Channel and back.

A Zodiac at Shepherd's Bush.

AMONG the attractions at the Japan-British Exhibition is now included a small Zodiac dirigible, known as "Dreuzi I," and owned by Viscount Dreuzi. It was inflated on Saturday week, and when the weather permits it is proposed to make voyages over London. The envelope has a capacity of 950 cubic metres, and the airship is intended to carry a pilot and a mechanic. There is a fan for inflating the ballonette. It has a capacity of 1 cubic metre per second, and keeps the envelope inflated to a pressure of 20 mm. of water. The engine is a 24-h.p. Ballot. It is fitted with a small disc fly-wheel, on the face of which is an internal expanding clutch operated by a lever in front of the pilot. The single propeller is 2.8 metres in diameter, and runs at 600 r.p.m., half the speed of the engine. The estimated speed is 40 kiloms. per hour. The car is constructed in three sections, and weighs altogether about 600 kilogs. Elevation and descent are controlled by a biplane-elevator, having 2.6 square metres surface, while steering is accomplished by a rudder having 5 square metres surface. The rudder and the elevator are operated by a pair of steering-wheels placed in tandem in front of the pilot. M. Bergeron is in charge of the airship.

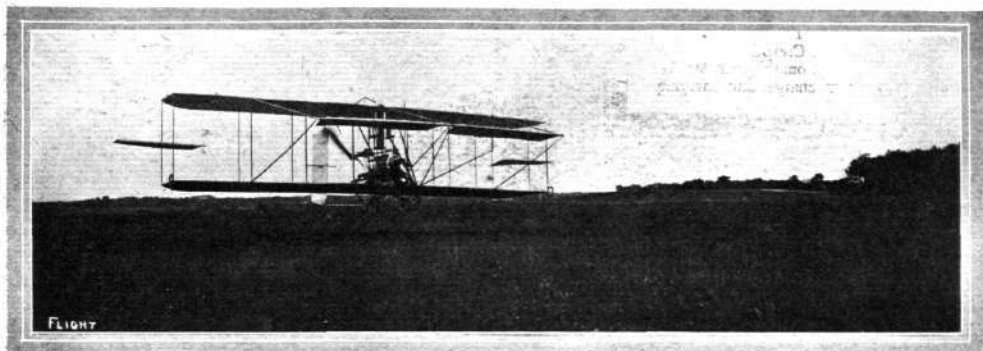
Ballooning at Bristol.

ON Sunday week the balloon which had been making captive ascents in the Zoological Gardens, Bristol, during the previous week, in charge of Mr. Percival Spencer, took its departure, conveying one of the members of the Bristol Aero Club and two other passengers for a delightful trip. In perfect weather, with a gentle south-west wind, the ascent was commenced at 10.15 a.m. The balloon quickly rose to a height of 1,000 feet, but hovered over the Zoological Gardens for rather over half-an-hour, and then bore away to the north-east, passing over Winterbourne as far as Iron Acton. At this point of the journey the wind veered round to the north-west, and the balloon altered its course, coming back towards Yate and near Chipping Sodbury, eventually alighting opposite the gates of Dyrham Park at 3 o'clock in the afternoon, thus taking nearly five hours to cover 18 miles. On one occasion the height attained was 3,900 feet.



GLIDING PRACTICE, AS A PRELIMINARY TO FLYING AT BROOKLANDS.—A lady pupil learning to make gliding flights at Brooklands Aerodrome under the tuition of Mr. Lane, who is conducting a flying school there upon these lines.

THE ACCIDENT TO MR. CODY.



Mr. S. F. Cody flying over Laffan's Plain on his modified biplane last week, before the serious accident which befel him later. Mr. Cody, who uses a Green engine, employs only one propeller now.

THE sympathy of all interested in British aviation has been extended to Mr. S. F. Cody, in consequence of the untimely accident which befel him on Thursday of last week while testing his new biplane. The machine had been completed on the previous evening, and was noteworthy for the fact that Mr. Cody had abandoned the system of twin propellers previously employed, while he had fitted duplicate engines, so that in the event of one giving trouble its place could be taken by the other. Early on Thursday morning Mr. Cody started up, and as the machine attained a greater speed than anticipated, when running over the ground, he determined on a flight. The machine gracefully rose to a height of 100 ft., and easily circled round the Plain twice. It then traversed the length of

Laffan's Plain, but just when gliding down an unexpected gust of wind caught the machine and caused it to fall about 40 ft. to the ground.

Mr. Cody was pinned beneath the wreckage, and was unconscious when released. He was immediately taken to his home, where he was found to be suffering from concussion of the brain and severe bruises. He made rapid progress, and on Monday was able to leave his bed, when he expressed a hope that he would be fit again in time for the Bournemouth meeting. Except that it is smaller, the new Cody machine has a very similar appearance to the biplane with which Mr. Cody was so successful last year. The engines are two of the 50-h.p. 4-cyl. Green type.

LONG-DISTANCE BALLOON RACE FROM HURLINGHAM.

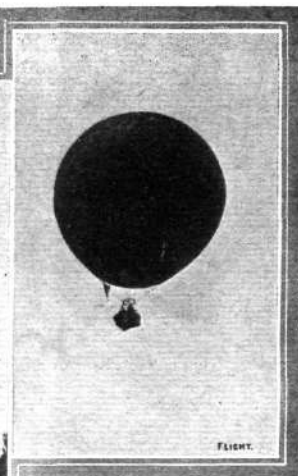
OF the seven entrants for the balloon race for the Hedges Butler Challenge Cup there were only four starters on Wednesday of last week, as Col. Capper and Mr. Mortimer Singer decided not to compete, while Capt. Maidland's "Witch of the Air" was placed *hors de combat* at the start. It was to have started first, but during the preparations one of the seams opened at the top, and the rent crept down the balloon, which collapsed rapidly. It would appear that possibly in the preparations the ripping cord had been pulled by mistake.

About an hour before the time fixed for the start a heavy storm of rain burst over Hurlingham, but it only lasted for about ten minutes, after which the sun shone bravely. At twenty-five minutes past three the Hon. Mrs. Assheton Harbord's "Nirvana," piloted by Mr. C. F. Pollock, made a good start, carrying in addition to the owner and pilot, the Hon. E. Brabazon and Mr. David Bingham. The south-west wind carried the balloon away in the direction of Norfolk, and it eventually landed near Beccles on the Norfolk border. Half an-hour after the "Nirvana" started, the "Uranus,"



AT HURLINGHAM FOR THE HEDGES BUTLER CHALLENGE CUP.—From left to right—Mr. Frank Hedges Butler, the donor of the cup; the Hon. Mrs. Assheton-Harbord, whose balloon "Nirvana" travelled the greatest distance; Mr. Goetz, a passenger in Mr. Dunville's balloon; Mr. John Dunville (balloon "St. Louis"); Mr. C. F. Pollock, pilot of "Nirvana"; Mr. Roger Wallace, K.C., Chairman Royal Aero Club; Capt. Walker and Major Sir A. Bannerman, Bart., passenger and pilot-owner respectively of "Uranus"; Mr. Eustace Short, one of the aeronautical engineers; Mr. A. P. Hoeler and Mr. B. H. Barrington-Kennett, passenger and pilot-owner respectively of "Comet"; Mr. Harold E. Perrin, Secretary of the Royal Aero Club; and Mr. A. Mortimer Singer, who has now recovered from his serious accident at Cairo, and pluckily intends to fly again at the earliest possible opportunity.

piloted by Major Sir A. Bannerman, R.E., and carrying Capt. Ommauey, R.E., ascended and started in pursuit. Following the same direction, it eventually landed at Elmstead, about five miles north-east of Colchester. The two remaining balloons, the "St. Louis," piloted by Mr. John Dunville, and carrying Sir Claude de Crespigny and Mr. Philip Gardner, and the "Comet" with Mr. B. H. Barrington-Kennett in charge, and carrying



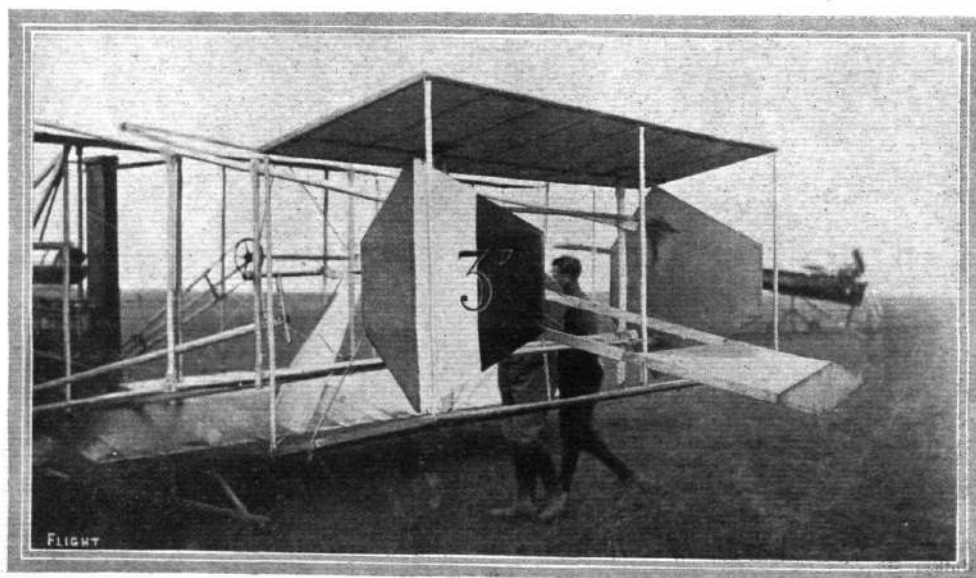
"Flight" Copyright.

THE HEDGES BUTLER CHALLENGE CUP FOR BALLOONS, LONG DISTANCE COMPETITION, HELD AT HURLINGHAM ON JUNE 22ND.—On the left

Capt. G. M. Maitland's "Witch o' the Air" just after the rent appeared in the balloon; in the centre Mr. B. H. Barrington-Kennett's "Comet" just away; and on the right Mr. John Dunville's "St. Louis" well up.

Mr. A. P. Hogler, made good starts within a few minutes of each other at 4.30 p.m. The "St. Louis" got nearly as far as Ipswich, coming down in the grounds of Tattingstone Place, five and a-half miles south-west of the town, while the "Comet" descended about ten miles south of Colchester. Each of the last three balloons passed through a very heavy thunderstorm in this

neighbourhood. It was this, in fact, which decided Major Sir A. Bannerman to make a landing in the "Uranus." As the cup was for the longest flight the Hon. Mrs. Assheton Harbord has been declared the holder. It is a curious coincidence that on each of the four occasions on which the race has been run the competitors have had to pass through thunderstorms.



Detail view of the new automatically-controlled tail-planes evolved by Capt. Etevé for his Wright biplane, with which he has been making such successful flights.

The Royal Aero Club of the United Kingdom

OFFICIAL NOTICES TO MEMBERS

Committee Meeting.

A MEETING of the Committee was held on Tuesday, the 28th June, 1910, when there were present:—Mr. Roger W. Wallace, K.C., in the chair, Mr. Griffith Brewer, Mr. Ernest C. Bucknall, Mr. John Dunville, Prof. A. K. Huntington, Mr. V. Ker-Seymer, Mr. F. K. McClean, Mr. C. F. Pollock, Mr. A. M. Singer, Mr. Stanley Spooner, and Harold E. Perrin, secretary.

New Members.—The following new members were elected:—

Lieut. John B. Bolitho.	Sir Reginald McLeod.
R. L. Charteris.	W. H. Playce.
C. F. Heathcote.	Mrs. J. F. Ramsden.
H. Kahn.	W. M. G. Singer.
R. Leigh-Pemberton, J.P.	I. Douglas C. White.
Alfred Longdon.	

Bournemouth International Aviation Meeting.—The list of entries for the Bournemouth International aviation meeting was approved. These appear on page 498.

Lanark International Aviation Meeting.—The following Clerks of the Course were appointed:—Prof. A. Barr, D.Sc.; Major C. de W. Crookshank, R.E.; V. Ker-Seymer.

Height Record.—The Committee considered the certified reports of the flight made by J. Armstrong Drexel at Beaulieu on the 19th June, 1910. The height certified was 1,100 ft., and the Committee resolved to recognise it officially as a height record for Great Britain. The record hitherto of 977 ft. was held by M. Paulhan, at Sandown Park, on November 6th, 1909.

Hedges Butler Challenge Cup.—The log sheets in connection with the balloon race from Hurlingham on Wednesday, the 22nd June, 1910, were considered, and the Hon. Mrs. Assheton Harbord was awarded the cup for the year 1910. Mrs. Harbord descended near Beccles, Suffolk, a distance of 105 miles.

Appointment of Timekeeper.—Mr. A. G. Reynolds was appointed an official timekeeper to the Royal Aero Club.

Balloon Race at Hurlingham.

The point to point balloon race for the cup presented by Mr. A. M. Singer, will take place at Hurlingham Club, Fulham, S.W., to-day.

Members of the Royal Aero Club will be admitted to the Hurlingham Club free, on presentation of their Royal Aero Club membership cards.

The Club balloon, "Aero Club IV," will follow the race. Members wishing to make the ascent are requested to notify the Secretary at once. The fee will be £5 per person, and the three seats available will be allotted in order of application.

Bournemouth International Aviation Meeting.

The International aviation meeting commences on Monday the 11th July, 1910, finishing on the 16th.

Hotel Accommodation.—Owing to the large number of applications for accommodation at the Hotel Burlington, only a few rooms are now available, and members desirous of securing same should make early application to the Secretary of the Club.

Admission of Members.—Members will be admitted to the 10s. enclosure on production of their membership cards and on payment of 2s. 6d. A special enclosed portion of the 10s. enclosure will be reserved exclusively for members of the Royal Aero Club and their friends. A well-furnished marquee will be erected in this enclosure which commands an uninterrupted view of the flying course, and refreshments will be obtainable at one end of the marquee. A portion of the grand stand has also been reserved for members of the Club, and admission will be given only on production of membership card.

HAROLD E. PERRIN,
Secretary.

166, Piccadilly.

PROGRESS OF FLIGHT ABOUT THE COUNTRY.

(NOTE.—Addresses, temporary or permanent, follow in each case the names of the clubs, where communications of our readers can be addressed direct to the Secretary. We would ask Club Secretaries in future to see that the notes regarding their Clubs reach the Editor of FLIGHT, 44, St. Martin's Lane, London, W.C., by first post Tuesday at latest.)

Aeroplane Building and Flying Society.

At a meeting held on Wednesday evening, when the business of passing the rest of the rules and electing officers was proceeded with, Mr. J. D. North, the founder of the society, was unanimously elected Chairman, and Mr. H. A. Myers, who was obliged to resign the post of hon. sec. owing to the large increase of work in connection with the society, was accorded a hearty vote of thanks for his services. Mr. Myers remains a member of the committee. Fifteen members were enrolled, and letters were received from several more who wish to become members. The entrance fee was fixed at one guinea for founder members, with a quarterly subscription of 16s. After the first 30 members are elected the entrance fee will be raised. Members were asked to keep a look out for premises suitable for the society's workshop and report to the committee. The society is now in a position to consider any ideas or suggestions from non-members as well as from members, but, of course, members will be given precedence. All communications should be addressed (letters only) to the hon. sec., W. H. Le Maître, 8, Manchester Street, Manchester Square, W. No drawings, &c., will be returned unless accompanied by stamps for postage.

Arundel House School Ae.C. (15, ARLINGTON ROAD, SURBITON).

On Saturday last, the 25th ult., the club gave a demonstration in the aerial rendezvous enclosure at the Crystal Palace. At the special request of the Aerial League, the Ridley glider was exhibited, but the lack of wind prevented anything but long hops being attempted. A large and enthusiastic crowd lined the gliding slope, and expressed keen appreciation of the performances of the machine. The various flying models, some of which covered a distance of 500 feet, also attracted considerable attention. A second demonstration has been arranged for to-day, Saturday, when, in addition to gliding flights, an attempt is to be made to exhibit to the public the practical utility of large kites, weight-lifting, towing, opening communication, and beacon-flare elevation all being on the programme. A member of the club may also make an attempt on the model aeroplane record for duration of flight.

Irish Clubs Amalgamate.

It is satisfactory to learn that the committees of the Irish Aero Club and the Aviation Association of Ireland have been able to arrange terms by which the two bodies will amalgamate. The Aero Club is working hard to make the meeting at Leopardstown a success, and there would appear to be every prospect of its being even better than could originally have been anticipated.

Oldham Aero Club (GARFITT STREET, OLDHAM).

In connection with this club a model flying competition is being arranged to take place on July 30th. Particulars can be had from secretary.

Sheffield and District Aero Club (36, COLVER ROAD).

MEMBERS are asked to note that the hon. sec., Mr. C. Wightman, has changed his address to 22, Mount Pleasant Road, Sharrow, Sheffield, to which all communications should be addressed in future.

Kite and Model Aeroplane Assoc. (27, VICTORY RD., WIMBLEDON)

THE first of the series of competitions being held on Wednesdays up to July 27th at the Crystal Palace rendezvous in conjunction with the Aerial League took place on Wednesday, June 22nd, being a high flying competition for models. There was a fair field of competitors, including one lady (Miss S. O'Neill), who flew a Ding-Sayers monoplane, and secured fifth place. Mr. S. Langridge, of Merton, made the highest flight, but Mr. Bragg-Smith beat him in stability.

The judges, Messrs. Stephen A. Marples, Harry Turrill, C. G. Grime, and J. H. Ledeboer, made the following awards (marks being given for height, stability and landing, duration of flight):—

1. G. Bragg-Smith (Bragg-Smith biplane) ...	76 marks.
2. S. Langridge (Marlborough monoplane) ...	70 "
3. A. Castle-Hunt (Marlborough duplex monoplane) ...	63 "
4. A. P. Riley (Marlborough tandem biplane) ...	50 "

The prizes were Aerial League silver medal to first, bronze to second and third.

On the same day the competition open to members of the association for the president's challenge shield for the best kite of the year was held. This proved a very keen and interesting contest, and the competitors all flew well.

The judges were Major B. Baden-Powell, Mr. C. Brogden, and Mr. Harry Turrill.

The following were the six best results, but the table shows the average angle and stability, observations on these points being taken at three different times during the hour the kites were flying:—

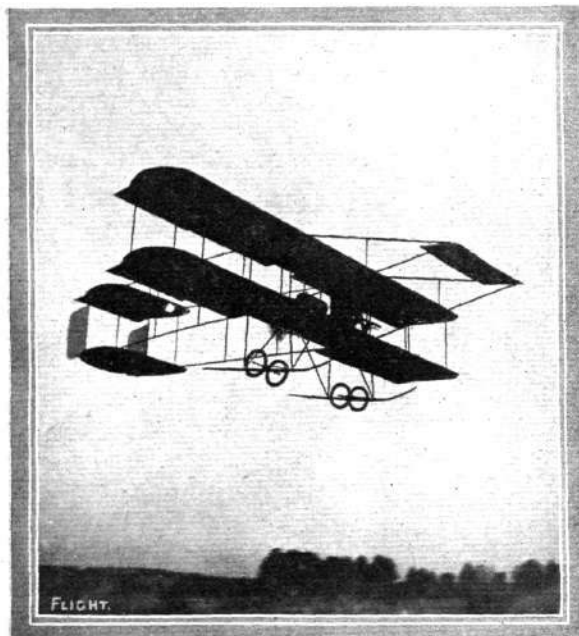
Place.	Name.	Description of Kite.	Average Angle.	Average Stability.	Collapse-bility.	Strength and Construction.	Total.
1	A. W. Brown (Croydon)	Box and wing...	59	26	16	17	118
2	B. S. Varnals (Gamage)	Quadroplane ...	48½	24½	16	17	106
3	H. W. Browne (Catford)	Two boxes with wings	46	22	18	18	104
4	W. Jones (Gamage)	Scout ...	52	16	19	15	102
5	C. Ridley {	Arundel Triangular box with wings	38	7	18	14	77
6	R. Lucas {	Ae. C. Do.	34	6	16	14	70

The Arundel House School were very unfortunate in their difficulty in getting their kites, which were very well made, to rise.

FOREIGN AVIATION AND AIRSHIP NEWS.

Doings at Mourmelon.

The Farman School.—Accompanied by a passenger, Lieut. Cammerman left on the 21st ult. for Toul, and landed 40 kiloms. from Chalons. Blondeau, in spite of a very stiff wind, was up for 50 minutes. The next day he was out for 38 minutes, and on the 23rd he took Miss Bird as a passenger during a 35-minute trip.



THE LATEST FARMAN MACHINE IN FULL FLIGHT.—The "Henry-Maurice Farman." The curious rounding of the ends of the planes will be noticed, whilst the combination of the best features in the Henry and in the Maurice models is apparent in the ailerons and the tail. Numerous pictures of the Henry Farman machines have been published in FLIGHT, and on March 19th, p. 219, the more recent model of the Maurice Farman machine.

Messrs. Gamage were also unlucky in having their angle taken just when it was not good, but Mr. Varnals obtained the highest possible marks for stability on the judges' third visit round, when the quadroplane looked as though it was cut out of the clouds.

Women's Aerial League (227, STRAND, W.C.).

On the 22nd ult., Mr. L. Blin Desbleds gave an address at the Imperial Institute on "Aerial Supremacy and How to Obtain It." After referring to the recent progress in aviation and the probable way in which aerial craft could be used in view of the decisions of the last Peace Conference, he went on to say that it was generally agreed that for military purposes aircraft must be capable of navigating at an altitude of 4,000 or 5,000 ft., must have the greatest speed possible, and must be capable of remaining in the air several hours. In conclusion, the lecturer remarked that, after examining the achievements of aeroplanes and dirigibles, up to the present he had to admit that the balance was very much in favour of the latter as the military aircraft of the present and near future; and he urged that, if England was to obtain aerial supremacy in the near future, large sums of money must be spent immediately on the construction in this country by British experts with British materials of full-sized military dirigibles.

Yorkshire Aero Club (63, ALBION STREET, LEEDS).

MR. WATSON having resigned the position of hon. sec. to the Yorkshire Aero Club, his place has been taken by Mr. Herbert E. Harwood, whose address is 73 and 75, Albion Street, Leeds.

Mr. Henry Farman, the same day, was trying two new machines, one of which has been specially built for the artillery, and during the trials of the latter he was accompanied by an officer.

The Voisin School.—De Ridder was up for an hour, De Langhe covered eight circuits, Ravetto made several short flights, while Colliex was trying a new biplane on the 21st. The first-named took Mme. de Ridder for a trip, which included several circuits of the ground, on Friday last. On Monday, Etienne Bunau-Varilla made some good flights on the new racing Voisin. He also took Nazzaro and Forest for short flights. The last-mentioned, on his own machine, later made three circuits of the camp.

Other Doings.—Various exploits of the members of the Antoinette School are referred to elsewhere. Several of the Sommer pupils have been practising regularly during the past week, and on the 21st, Mme. Jane Herveu, on her Blériot, flew for a circuit and a half.

Wachter and Labouchere Fly to Rheims.

THE cross-country trip from Mourmelon to Betheny is becoming quite a common feat now, and during the week end both Wachter and Labouchere made the journey, mounted on their respective Antoinette monoplanes, their average altitude being 700 metres. On arrival at their destination they saw their pupil Thomas make two trials each of 20 minutes duration.

Busson at Juvisy.

USING his Blériot fitted with a Labor-Picker motor, Busson, on the 22nd, flew for 35 minutes, during which time he covered about 40 kiloms., mostly over the Savigny valley, his average height being 150 metres. He also was up for 20 minutes on Saturday last, flying over the country by way of preparation for a long cross-country trip which he proposes to make shortly.

Long Flight by Tabateau.

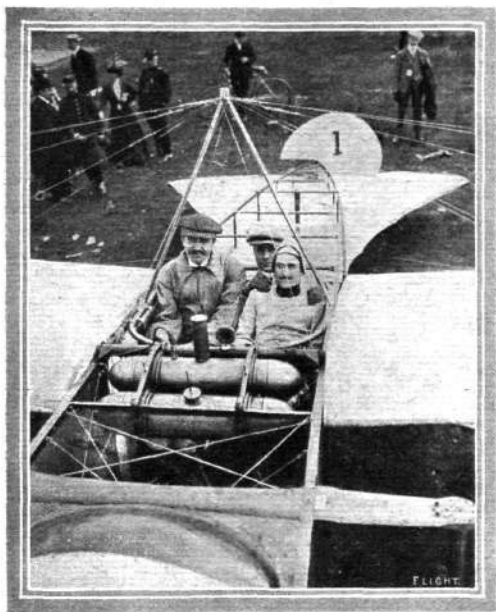
ON the 21st ult., Tabateau, on his Maurice Farman biplane, made a splendid flight at Buc, which lasted 1 hr. 14 mins. During this time he traversed about 108 kiloms., flying several times round a circuit which included Chateaufort, Voisins-le-Bretonneux, Guyancourt, Buc, Saclay, and Toussus le Noble.

Balsan at Chartres.

HAVING motored out from Paris, Balsan, on his Blériot, gave several demonstrations on the 21st and 22nd ult. One of his longest flights was of 25 kiloms. at a height of 40 metres. His monoplane is now fitted with a Darracq motor.

Practice at Issy.

ON the 21st ult., Vercepus, on a Demoiselle, easily made the flight for his pilot certificate, but pump troubles caused him to abandon further attempts. On the same day the Russian aviator, Lewkowicz, at his fourth trial on his Blériot, flew round the parade



M. Morane at Rouen Meeting with his two passengers (not "Three Men in a Boat"), whom he took up in his new Biériot monoplane, "No. 1." Both man and machine will be seen at Bournemouth Aviation Meeting this month.

ground three times at a height of 10 metres. Lieut. Fequent left Issy on his Henry Farman machine on the evening of the 23rd ult., and returned to Vincennes.

The Wright School at Villacoublay.

ON the 23rd ult. Lieut. Chevreau, who has been taught to fly a Wright machine by Count Lambert, easily passed his examination for his pilot certificate, while Lieut. Maillols passed the last two tests. A visit to the Wright works was made on the same day by M. d'Estournelles de Constant, who was taken for a short trip by Count Lambert.

A New Sommer School.

IN view of the restrictions at Mourmelon with regard to flying, M. Roger Sommer has decided to establish a new school at Sedan, where his pupils will be able to fly at all hours of the day.

Labouchere Flies from Chalons to Rheims.

RISE from the flying ground at Mourmelon on the 20th ult., Labouchere, on his Antoinette, flew across to Betheny and stayed there overnight, in order to demonstrate the powers of the Antoinette monoplane before the Turkish officers who were visiting the Rheims aerodrome. He made two splendid flights, passing over Rheims and Witry, and in the second trip he planed down to earth from a very great height. Doullens also made several trips on M. Paul de Lessep's Sommer.

A Flying General.

ALTHOUGH it is not anticipated that many Generals of to-day will qualify as pilot aviators, France at least boasts one officer of that rank who has made remarkable progress. After only a few short lessons, General Bonnier, of the French Colonial Infantry, mounted his Henry Farman biplane and made two circuits of the flying ground at Betheny, covering about 8 kiloms.

Labouchere Flies to a Café.

WHILE flying with Count Robillard on his Antoinette monoplane at Chalons Camp the other day, Labouchere surprised his companion by suggesting that they should call at a café to get refreshment. Suiting the action to the word, he flew over to Mourmelon, and brought his machine to rest in a field outside a café. Having been served, the two aviators remounted their machine, and flew back to their headquarters at the Camp.

Tsar of Bulgaria at Chalons.

ON the 25th ult. the Tsar of Bulgaria accompanied President Fallières to Chalons to witness some manoeuvres. Unfortunately, the weather was not particularly suitable for flying, and so the Army flyers were not out. The pupils of the Voisin and Antoinette schools, however, made a few trials, and Labouchere rose to a height of 300 metres and landed by planing down. When the official procession returned to Bouy Station, in the afternoon, they were accompanied by Labouchere and Wachter, both on Antoinette monoplanes.

An Ambitious Experimenter.

IT is reported from Brussels that in view of the successful experiments made with his new monoplane, fitted with flexible wings, the aviator Goffaux is now making arrangements to fly from Ostend to London and back during next month.

French Army has a Sommer Biplane.

AFTER a trial trip lasting 2 hrs. 10 mins., and a passenger flight of half an hour, Sommer has delivered his first military machine to the French Army. Three other Sommer biplanes, also destined for the Army, are nearly ready for delivery.

A 500 feet Drop.

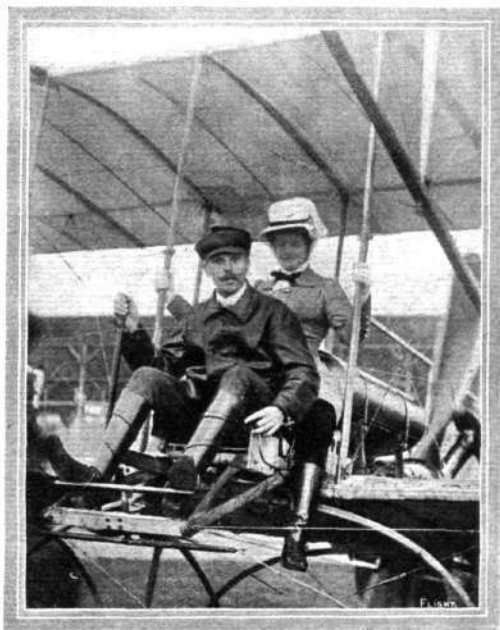
WHILE flying a Farman biplane at the Chitila flying ground, near Bucharest, Guillemin had an alarming experience. He was at a height of 500 feet when his engine stopped. The machine came down at a great speed, and fell into a lake, being considerably damaged. The aviator escaped with a fractured leg.

America's International Meeting.

IT has now been decided that the International meeting to be held in America, the programme for which will include the Gordon-Bennett Race, is to take place at the Garden City, Long Island, on October 22nd. At the same time an endeavour is being made to get the International Federation to sanction the meeting being held in September.

A Flying Week for Metz.

ARRANGEMENTS are in progress for a flying week to be held at the end of September between Trèves and Metz. Already a sum of 30,000 marks has been raised by the two towns.



Warchalowski and the Grand Duchess Augusta after the flight at Budapest.

THE ROUEN MEETING.

In our last issue we gave the results at Rouen up to Tuesday last, when Capt. Dickson was leading in the competition for the longest distance flown. On Wednesday Verstraeten was the hero of the day, and covered 141 kiloms., Cattaneo being next with 117 kiloms., and Capt. Dickson third with 105 kiloms. Altogether there were a dozen aviators who ventured out in the afternoon, but the flying was cut short by a violent storm in the evening. One stirring incident was a race between Verstraeten and Paillette on Sommers, and Latham on the Antoinette. Morane won the height prize, rising on his Blériot to 290 metres. There was a similar prize on the following day and at a first attempt Morane got up to 434 metres. This was later beaten by Efimoff (444 metres), and Chavez (497 metres), and then Morane made a second trial, this time reaching 521 metres. Morane also made a trip round Rouen Cathedral greatly to the delight of the crowds who witnessed it. Unfortunately Capt. Dickson met with a slight mishap on this day, which gave Cattaneo the chance once more to gain the lead in the totalisation contest. Hanriot did most flying during the day, covering 135 kiloms., while Dubonnet was second, 123 kiloms., and Cattaneo third, 105 kiloms. Capt. Dickson carried a passenger for 27 kiloms. in 28 mins. 49 secs. On Friday the weather was really bad and only eight flyers ventured out. It afforded Latham, however, an opportunity of displaying his airmanship, and he flew while the wind was blowing its hardest. He led on the day's results, having covered 51 kiloms., whilst Audemars was second on the Demoiselle with 39 kiloms. In the preliminary speed trials over 9 kiloms. the latter was best, his time being 7 mins. 34 secs., Latham taking second in 7 mins. 35 secs., Hanriot third in 7 mins. 59½ secs., and Dickson fourth in 9 mins. 1 sec.

On Saturday the duel between Cattaneo and Capt. Dickson was resumed, and at the end of the day they were exactly equal, each having flown 696 kiloms. Unfortunately Cattaneo collided with Latham, which placed the Blériot out of the running; but just previous to this it had won the speed prize, doing the 9 kiloms. in 7 mins. 20 secs., beating Latham's 7 mins. 26 secs. and Dubonnet's

7 mins. 59 secs. On the day's flying Dubonnet led with 150 kiloms., while Latham covered 135 kiloms., Hanriot 99 kiloms., Paillette 72 kiloms., Kuller 66 kiloms., and Capt. Dickson 60 kiloms. On the last day the weather was again unpropitious, and the two Antoinettes were in the air most; that of Kuller covering 99 kiloms., while Latham was second with 54 kiloms. Capt. Dickson was out, and covered 51 kiloms., and thus finally secured his position as leader in the totalisation competition. Cattaneo made a valiant effort, after repairing his machine in record time, to catch up to Dickson, but he could only add 35 kiloms. to his score, and so had to be content with second place. The results of the different competitions held during the meeting are shown below.

Height Prize.

1. Morane (Blériot)	521 metres.
2. Chavez (H. Farman)	497 "

Speed Prize (9 kiloms.).

	m.	s.
1. Cattaneo (Blériot)	7	17
2. Latham (Antoinette)	7	26
3. Dubonnet (Tellier)	7	59

Longest Distance Without Landing.

	k.	m.	s.
1. Dickson (H. Farman), 141 kiloms.	2	27	44
2. Cattaneo (Blériot), 117 kiloms.	—	—	—
3. Latham (Antoinette), 84 kiloms.	1	15	29
4. Verstraeten (Sommer), 81 kiloms.	—	—	—
5. Paillette (Sommer), 66 kiloms.	1	7	0

Planing Prize.

1. Bathiat (Breguet)	426 metres
2. Dickson (H. Farman)	204 "

Circuit Speed Prize.

	m.	s.
1. Cattaneo (Blériot)	2	18½
2. Audemars (Demoiselle)	2	24½
3. Morane (Blériot)	2	30½

Grand Prix de Normandie.

	m.	s.
1. Paillette (Sommer), 18 kiloms.	17	12

Passenger Prize.

1. Efimoff (H. Farman)	180 kiloms.
2. Morane (Blériot)	157 "
3. Dickson (H. Farman)	141 "

Prize for Total Distance Flown.

1. Dickson (H. Farman)	747 kiloms.
2. Cattaneo (Blériot)	735 "
3. Latham (Antoinette)	521 "
4. Dubonnet (Tellier)	507 "
5. Hanriot (Hanriot)	480 "
6. Audemars (Demoiselle Clément-Bayard)	261 "
7. Verstraeten (Sommer)	255 "
8. Kuller (Antoinette)	192 "
9. Morane (Blériot)	165 "
10. Paillette (Sommer)	156 "
11. Efimoff (H. Farman)	141 "
12. Bruneau de Laborie (H. Farman)	126 "
13. Christiaens (H. Farman)	48 "
14. Bathiat (Breguet)	36 "
15. Mme. de Laroche (Voisin)	30 "
16. Van den Born (H. Farman)	21 "
17. Dufour (Voisin)	18 "
18. Chavez (H. Farman)	12 "
19. Metrot (Voisin)	9 "

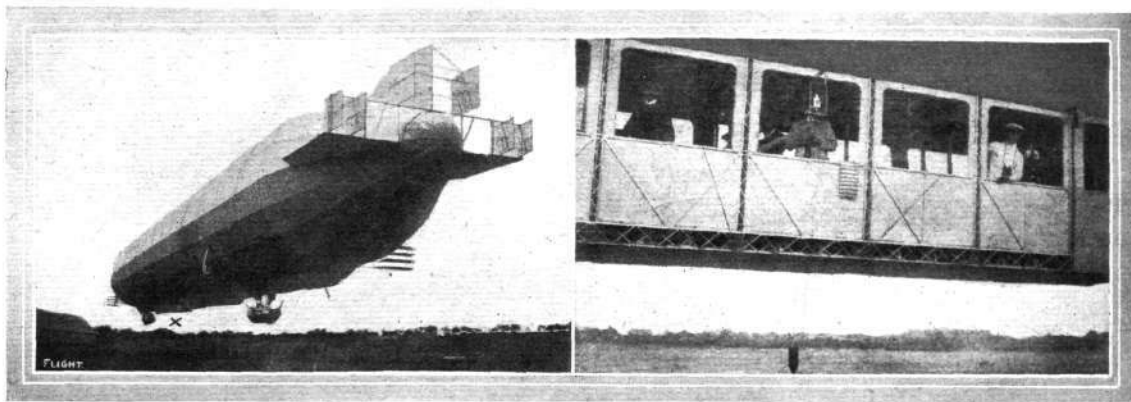
Altogether a sum of 153,270 frs. was expended in prize money, and the aggregate amount taken by each of the aviators was as follows:—

1. Dickson, 28,100 frs.; 2. Morane, 22,800 frs.; 3. Cattaneo, 22,800 frs.; 4. Efimoff, 14,900 frs.; 5. Latham, 14,460 frs.; 6. Dubonnet, 12,400 frs.; 7. Hanriot, 9,100 frs.; 8. Audemars, 6,900 frs.; 9. Chavez, 5,040 frs.; 10. Paillette, 3,700 frs.; 11. Verstraeten, 3,600 frs.; 12. Bathiat, 3,600 frs.; 13. Kuller, 2,900 frs.; 14. Christiaens, 2,750 frs.; 15. Bruneau de Laborie, 500 frs.; 16. Mme. De Laroche, 150 frs.; 17. Dufour, 90 frs.; 18. Van den Born, 50 frs.; 19. Metrot, 30 frs.



Poster for the Rouen Aviation Meeting held last week.

AIRSHIP NEWS.



"Zeppelin VII," which last week sailed from Friedrichshafen to Düsseldorf for its initial passenger service voyage.—On the right is a detailed view of the passenger "car," which is placed (marked X) below the "keel" of the airship, between the two navigating cars.

The "Deutschland" (Zeppelin VII) Success and Mishap.

REGRETTABLE as the disaster which occurred on Tuesday to Zeppelin VII, or "Deutschland," is, the lessons that will have been learnt will probably more than compensate for the loss which it entails. Carrying a crew of twelve and twenty-one passengers, the great airship left the shed at Gobzheimer Heide, near Düsseldorf, on Tuesday morning, and rising to a height of 500 ft., started off in a south-easterly direction for a three hours' cruise. After about two hours, one of the propellers stopped, due to a defect in the motor, and about the same time the wind changed and a storm rapidly developed. Against this the airship was unable to make any headway. First an attempt was made to reach Münster, but the wind forced the airship about seven miles off her course. Then Osnabrück was made for, but as the airship by this time had been nine hours in the air, the petrol supply gave out, and the vessel became practically derelict. Eventually the dirigible settled down on the fir trees of the Teutoburger Wald, where it now lies in a precarious state. Fortunately every one of the thirty-three persons on board were rescued without mishap.

The first trip of this great aerial liner on Wednesday of last week was as successful as Tuesday's was the reverse, when it left Friedrichshafen at 3 a.m. and came to rest at Düsseldorf nine hours later after a journey of nearly 300 miles. The route was over Ulm, Stuttgart, Mannheim, and along the valley of the Rhine. Count Zeppelin was personally in command and there were a dozen other persons on board. On Friday the first regular passenger trip was undertaken. Manned by a crew of twelve and carrying twenty passengers, half of whom were ladies, the airship cruised for three hours over the heart of industrial Germany. During the latter part

of the time, rain and contrary winds were encountered but the passengers suffered no discomfort. Rain and wind prevented the ship leaving her shed on Saturday and for the same reason the voyage to Cologne on Sunday had to be abandoned.

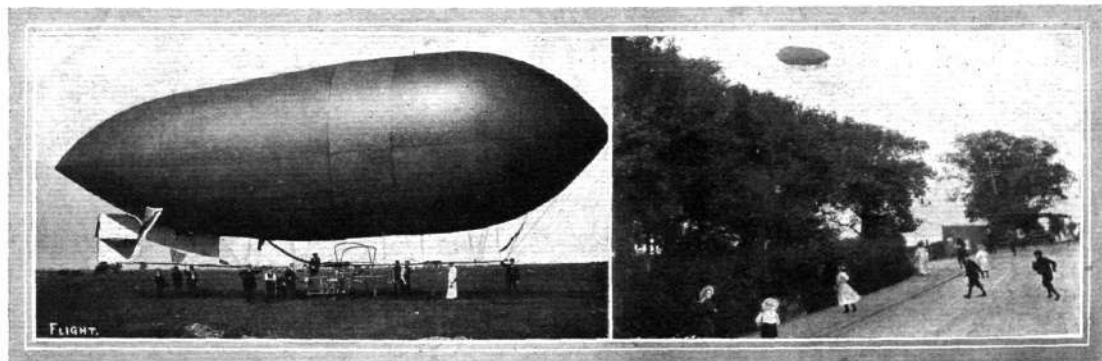
In general appearance the latest Zeppelin is similar to her predecessors, except that the gangways connecting the two cars are enclosed, and in the centre of this a miniature Pullman car is fitted. The walls are constructed of aluminium, covered with mahogany; the furniture consisting of a score of wicker chairs. The external appearance of this cabin can be gathered from the photographs which we reproduce.

"Clement-Bayard II" has Another Trial Trip.

IN the early hours of Saturday week, the "Clement-Bayard II" was taken from its shed at Lamotte-Breuil and manoeuvred for over an hour above the forest of Compiègne and along the valley. This time the landing was effected successfully. Lieut. Tixier was in command, accompanied by the usual crew.

Cologne to Brussels by Dirigible.

THE military authorities at Etterbeck, near Brussels, were surprised in the early hours of Monday week by the landing of a strange dirigible in the barrack ground. It subsequently turned out to be the Clouth airship, which had sailed over during the night from Cologne, and had crossed the frontiers of France and Belgium without being noticed. Capt. von Kleist piloted the airship, assisted by Eugene Clouth, a son of the constructor and an engineer named Dilq. The distance covered was about 125 miles, and the time taken about 5 hrs. 20 mins.



The Willows airship at anchor on East Moors, Cardiff, during its recent excursion across that city, to which we drew attention on page 486 of June 25th; and on the right the dirigible is seen en route sailing over Pen-y-lan Hill, Cardiff.

CORRESPONDENCE.

* * The name and address of the writer (not necessarily for publication) MUST in all cases accompany letters intended for insertion, or containing queries.

Correspondents asking questions relating to articles which they have read in FLIGHT, would much facilitate our work of reference by giving the number of the letter.

NOTE.—Owing to the great mass of valuable and interesting correspondence which we receive, immediate publication is impossible, but each letter will appear practically in sequence and at the earliest possible moment.

JOINING BAMBOO WITHOUT BINDING.

[581] In dealing with the joining up of bamboo (No. 456) in relation to aeroplane work, one needs to be somewhat diffident and always careful as to submitting methods in the least degree questionable as regards strength and durability, always keeping in mind the fact that a valuable life may depend more or less on the result. So while I myself consider that a well-fitted, plugged, and long properly-adjusted "splice," well glued together and, when dry, carefully tape-bound with double diagonal overlay, the whole again treated with thin glue, smoothed down, dried, and then finished with a stain to match other parts, forms a joint at once strong, reliable and durable, there are other methods which may be as good and perhaps look better when finished. I herewith endeavour to describe one other, which, next to the last-named, is the best I have seen.

Having selected the ends to be joined, cut these ends so that a portion free of the next "knot" is about 8 ins. long on each piece, and have the two ends as near the same diameter as possible; cut them square to fit well in cross-section. Next make a wood plug of good dry, fairly hard English ash, slightly larger than the "bore" of the rods. Next cut off a length of thin steel tube 6 ins. long, of a size to fit outside the rods very tightly; carefully drive this on to one end 3 ins. Now fit the plug in this end to enter, say 6 ins., then dip into thin glue and drive it home. Now fit end of other rod on to plug, and see that it fits tight and well inside the steel tube. When satisfactory, glue plug and drive on as before. Now make the tube hot (not burning) by revolving over a lamp or gas-ring, to allow glue to spread inside the bamboo; stand aside to cool and glue to dry (about 12 hours). Next bore two small holes right through the normal centre, at right angles to each other, drive in a stout wire nail, cut off and file down level; this gives a strong, neat joint.

Note.—Before driving wood plug, bore a small $\frac{1}{8}$ in. hole in one side of each bamboo, about half an inch or so further from the open ends than the plug will reach, to let out the "compressed" air caused by driving in glued plug. Otherwise the bamboo may burst open at that part or cause a severe split. The length of tube should be not less than four times diameter of the bamboo at joint.

Newport Pagnell.

H. Y. BATH.

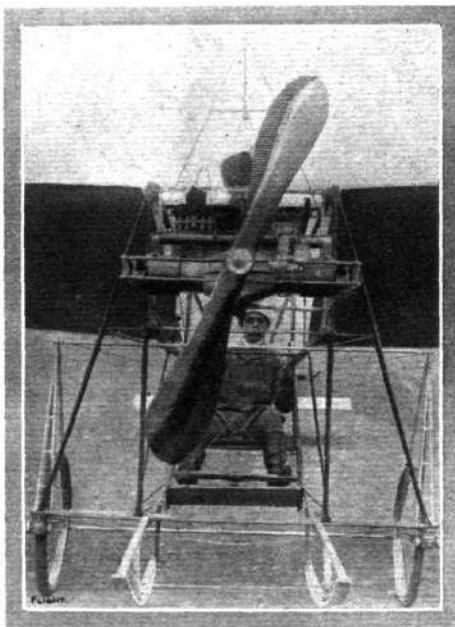
DIHEDRAL ANGLE.

[582] The question of the dihedral angle [502] is a most interesting one, and if we are to take a leaf out of the book of Nature we would, under certain circumstances, find that by inclining the wings of an aeroplane (i.e., making the upper angle between them less than 180°) we would add to the stability of the machine. The explanation given by your correspondent Mr. R. C. Clinker [No. 502], that the angle between the wings has no effect on stability when the aeroplane is travelling horizontally, is quite correct, as the moments of the forces balance about the centre of gravity. But if the aeroplane is gliding to the ground, the inclination of the wings has a distinct stabilizing effect, for the total vertical reaction of the air pressure is sensibly pro-

portional to the cosine of the angle made by the wing with the horizontal (i.e. the horizontal projected area of the wing), and this produces a righting couple. We have all seen pigeons quickly descending by forming their wings into a V, and nothing could be more stable than the body of the bird under such conditions. To show this experimentally, double up a sheet of paper into a V, and load it along the crease. Upon letting it drop it will be found to be perfectly stable transversely. I do not suggest for a moment that the upward reaction of the air pressure on a descending aeroplane with the engine shut down is equal to that when the machine is under the influence of its motive power, but since there can be no possible drawback to forming the wings at an angle less than 180° , and since there is a possible advantage when gliding to the ground, why should we not do it? Sir Hiram Maxim is putting these principles into practice, as your excellent illustrations show, by making the angle of his wings with the horizontal somewhat larger than we have seen on other flyers. It is a step in advance.

Victoria Street, S.W.

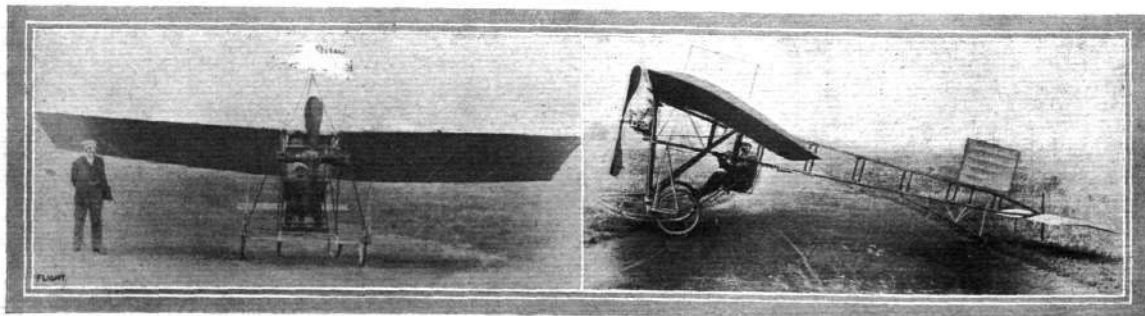
ROBERT S. BALL.



Front View of Mr. Batchelor's Monoplane.

A BRITISH-BUILT MONOPLANE.

[583] I enclose you photos of my monoplane which I have built all myself (excepting the Alvaston engine and the Cochrane pro-



Mr. A. Batchelor's Monoplane.

pellor) in my spare time. It is all English; the covering is by Dunlop. I commenced it last September, and have had it finished the last three weeks, but am waiting for the Royal Aero Club, of which I am a member, to allow me to try it at Eastchurch. The width over all is 28 ft., with a total length of 26 ft.; the total weight is 480 lbs., with petrol and water complete. I shall be pleased to show it to anyone interested or anyone thinking of building. I find it is a task not to be lightly undertaken.

Rochester.

ALBERT BATCHELOR.

AEROPLANE ENGINES.

[584] Would it be possible to make some use of the exhaust from petrol engines used on biplanes and other aeroplanes of this class to drive an extra propeller, or in some other way?

I suppose a turbine, as they are now constructed, would be useless on account of the heat.

I have an idea that a very light engine, combined with a specially-constructed turbine, would work well, also be made at a reasonable cost.

I should be pleased to hear if anything of this kind has been tried. Yorkshire Aero Club.

W. C. OUSTON.

[The use of the exhaust from a petrol engine, although a fascinating problem, is one fraught with many difficulties, owing to the fact that most attempts to obtain power from the exhaust are very apt to result in a curtailing of the power from the main engine. A considerable amount of power is, of course, wasted in the exhaust, and to retrieve some of it would be advantageous. It must be borne in mind, however, that an internal-combustion engine is already a very efficient prime mover, and it cannot, therefore, be reasonably supposed that any project for making it still more efficient is likely to be susceptible of immediate solution.—ED.]

WOOD FOR A 12-FOOT GLIDER.

[585] I am building a small "glider" 12 ft. long. Would any of the readers of your valuable paper give me an idea as to thickness of wood required, &c., &c. I may say your paper, *FLIGHT*, has been of great use to me.

Birkdale.

J. F. LEEING.

PATENTS AND THEIR VALUE.

[586] At the present moment two things should be occupying the minds of all those interested in the development of aeronautics.

The first is the wonderful revelation of flying given by M. Paulhan for the *Daily Mail* £10,000. The second is the Wright Bros.' litigation.

The first gives us an idea of what the future development will be, and the second ought to make us wonder what is going to happen. Having spent some months developing a modification of Blériot's monoplane, including details of building construction, landing skids, &c., which I hope to see embodied in a full-sized machine, I, and no doubt many others who have been quietly working, would be glad to learn how far we are justified in building a full-size Blériot or Farman pattern of machine even if it is modified. What protection is there for our ideas, or the ideas that have gone before? They appear to be modified *ad lib.*, copied, and included in almost every machine by every maker.

In this connection may I suggest a valuable addition to your already valuable paper, which is to point out on each one of the leading machines any detail that has been granted a patent, so that some of us may know where we are. May I also add that I am contemplating the construction of a full-size machine, but having my time fully occupied in another business I would be glad to meet with a partner who would be willing to share the expense of building the machine, and developing a scheme in connection with an ideal flying ground. Aviation appears to be at a discount in this district, but perhaps this may meet the eye of someone equally interested; if so, I would be glad to hear from him.

Darlington.

E. BANCROFT.

SINGLE-SURFACED PLANES.

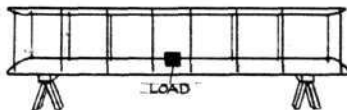
[587] While in full accord with the Editor that the ribs of the single-surfaced planes should be on the "upper" side, I think they should have all corners and edges rounded off. Angles of any kind should be avoided, or filled in as far as possible. The ribs should also be covered their whole length with some light fabric, such as book muslin, which should be closely and evenly pasted down each side of each rib, and spread out flat along the covering fabric half an inch wide all along. This produces a stiffening effect without adding weight.

Newport Pagnell.

HENRY BATH.

TESTING STRENGTH OF AEROPLANES.

[588] A useful tip for your readers in connection with testing the strength of the construction of their machines is this: Place the ends of the planes on trestles, and then load the machine gradually with the weight it will have to support in the air in the shape of



motor, pilot, &c. If the wings bend too much they will not be strong enough to support the weight in the air.

I loaded my machine with 400 lbs. in this way, and there was no appreciable bend in the main spars. I imagine that if the machine is not strong enough it will probably break under this test.

Belfast.

LILIAN E. BLAND.

HANDLEY PAGE MONOPLANE.

[589] I noticed in your issue of June 11th that the Handley Page monoplane has been flying at Barking. I was very interested in this machine at Olympia, being particularly struck by the shortness of the body and the very small rudder and elevator surface. Perhaps the designer or some of your correspondents could explain how such a small elevator and rudder can be effective at so small a leverage, and how longitudinal stability is maintained. If so short a body is satisfactory, why are the Blériot and Antoinette monoplanes built with so much greater length?

Camden Hill, W.

TYRO.

THE DUNNE AEROPLANE.

[590] I have read with interest the articles on the Dunne machine, as all my experiments on stability must have been parallel but not similar to Lieut. Dunne's, and I quite agree with his ideas.

If the side screens were taken from the ends of the planes the stability of the machine would be reduced, not that I think side screens produce stability, but these, in conjunction with the patent main planes, help the stability of the machine.

I have not room in this letter to explain or give any details why the Dunne machine is so steady, and as my own machine has not passed the model stage I cannot give any details of it.

The whole matter put in a few lines is that stability, steadiness, or absence from oscillating motion depends on the side waves leaving the ends of the main planes; the Dunne machine reduces them, whereas my machine utilises them.

Hoping this is a new view to some of your readers, and even perhaps to Lieut. Dunne.

Govan.

L. RENATEAU.

MODELS.

PAPER GLIDERS.

[591] In reply to *Sturnus* (333), I will give a few of my experiences.

My gliders are made of stiff sermon paper about 9 ins. × 6½ ins. and 3 ins. × 9 ins. when made up.

My record came about 200 to 300 yards down a steep hill; on calm days they went to the bottom.

My chief trouble was to get them to go straight when there was any wind, but by many experiments I not only got them to go straight but they would face and turn against a side wind.

In one experiment I sent it off as usual, and there was a good ascending current coming up the hill; it sailed off at a good speed against the wind, and rose all the time. The wind getting stronger it was driven back to the trees quite 30 ft. higher than its starting point; it kept its head to the wind all the time.

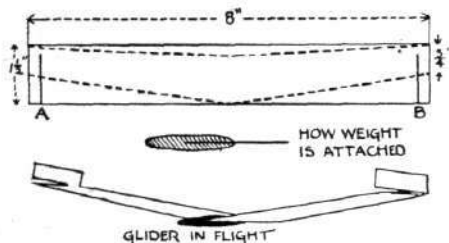
In another experiment I started a glider as usual, and the wind catching it suddenly made it tip up, whereupon it dropped a few feet, righted itself, came right up, and went on upside down instead of looping the loop.

Watford.

R. NEVE.

[592] I have made a paper glider, which will, I hope, interest you. A piece of notepaper, 8 ins. by 1½ ins., is marked out as shown. It is cut nearly through at A and B, and it is cut round dotted lines. The end pieces are then bent up at right angles.

It is weighted by means of a thin stick, split halfway up centre and stuck on as shown. By turning the end pieces, the glider may be made to go either in circles or in a straight line. It glides 3 in 1 when properly weighted, which I think is not bad. I should like



to know which is the best wood for making small tractor-screws for models.
Bath.

W. W. LACEY.

MODEL WOOD WANTED.

593] If there are any of Hobbies, Ltd., agencies in your town or neighbourhood, you cannot do better than apply to them for your wood for the 4 ft. model named. But why not cut and prepare the pieces yourself? It will greatly increase your pleasure to have learned to saw and plane, to size and fit up, your "own dressed up" materials, to do which, proceed as follows:—
Obtain a piece of $\frac{1}{2}$ -in. pine, 4 ft. 3 in. long (any width from 11 in. to 18 in.), see that it is fairly dry (*i.e.*, not water wet), if not, let it stand in a warm room (not near a fire), for a day and a night. Next, if there is a "very white" looking part on each outside edge of the board remove this with saw; it is "sapwood," and no use for your model.

Next, plane the two edges straight and square, that is, at "right angles" to the broad surfaces.

Then get an ordinary carpenter's gauge, sharpen (with a saw file) the pin quite flat, and parallel to the face of the gauge, then set the point of pin a little more than a $\frac{1}{4}$ in. from this face, lay the board flat on your table or bench, and carefully run this point along the board from each edge, pressing firmly downwards; now turn the board over and repeat, when, if the point has penetrated deep enough, you can break off each consecutive strip; then plane edges of board square as before, and repeat with gauge, till you have pieces enough for the purpose.

This will leave only one side of each piece to be dressed up to remove the raised part in the centre at the point of "partition." Try this, and the ease with which it can be accomplished with a little practice will much surprise and greatly please you. Should the board be very rough, it will be better to plane it over both sides with a carpenter's smoothing plane.

Newport Pagnell.

HY. BATH.



Rheims Aviation Meeting.

THE South-Eastern and Chatham Railway have arranged to run a special service from Calais to Rheims in connection with the 9 p.m. train from Charing Cross on July 2nd and 9th. A special train for the return journey will leave Rheims at 8.30 p.m. on the Sunday, reaching London at 5.45 a.m. Monday. Cheap return tickets will be issued, first class, £2 17s.; second class, £2; and third class, £1 7s. For the convenience of those who wish to travel in advance of the above service, cheap first and second class tickets only, at above fares, will be issued on Fridays and Saturdays, July 1st, 2nd, 8th and 9th, by the 11 a.m. service from Victoria, *via* Dover and Calais, reaching Rheims 7.46 p.m.



NEW COMPANIES REGISTERED.

L. D. Gibbs and Co., Ltd., 166, Piccadilly, W.—Capital £1,000, in 1s. shares (14,500 "A" and 5,500 "B"). Manufacturers of and dealers in airships, aeroplanes, &c.

London Aviation Ground, Ltd., 13, Greek Street, W.—Capital £500, in £1 shares. First directors: E. R. Beney, R. Lascelles.



Aeronautical Patents Published.

Applied for in 1909

Published June 30th, 1910.

13,418. J. W. DUNNE. Controlling devices for aeroplanes.

15,885. K. TUTZER. Airships.

23,967. H. O. ELANE. Flying machines.

27,892. H. RÖTTGES. Flying machines.

Published June 30th, 1910.

940. H. L., A. E., AND H. O. SHORT. Connecting and adjusting tension of tie-rods, tension-wires, wire ropes, &c.

DIARY OF FORTHCOMING EVENTS.

British Events.

1910.	1910.
June 27-July 2 Wolverhampton.	July 28-Aug. 3 Blackpool.
July 2 Balloon Race, Hurlingham.	Aug. 6-13 Lanark.*
July 9 Coventry A.S. Model Trials.	Aug. 15-20 Blackpool.
July 11-16 Bournemouth.*	Aug. 17-24 Southend.
July 16 Kite and Models Competition. Kite and Model Aeroplane Assoc.	Aug. 24-27 Cardiff.
July 20-24 Doncaster.	Aug. 29-30 Dublin.
July 23 Balloon Race, Hurlingham	Sept. 1-3 Folkestone.
	Sept. 8-10 Durham.

Foreign Events.

1910.	1910.
July 3-10 Rheims.*	Oct. 18-25 St. Louis. Gordon-Bennett
July 24-Aug. 4 Belgium.*	Balloon Race.
Aug. 6-21 Circuit de l'Est (<i>Marin</i>).	Oct. 25-Nov. 2 America. Gordon
Aug. 25-Sept. 4 Havre-Trouville.*	Bennett Aviation Cup.
Sept. 24-Oct. 3 Milan.*	Dec. 4-18 Marseilles.
Sept. 25-Oct. 3 Biarritz.	

* International.

BACK NUMBERS OF "FLIGHT."

SEVERAL back numbers are now very scarce, and have been raised in price as follows:—

1909.		s.	d.
No. 2, Jan. 9, containing	Table of Propellers ...	1	6
6, Feb. 6, "	"How Men Fly" ...	1	0
	Aeronautical Bibliography.		
8, " 20, "	Wright Bros.' Elevator Patents.		
	Flying Ground at Farnbridge	1	0
	Illustrated Glossary.		
10, Mar. 6, "	Human Side of Flying ...	1	0
	Aero Club Ground at Shellbeach.		
	Military Aeronautics.		
12, " 20, "	Souvenir Supplement ...	1	6
15, Apr. 10, "	Engines at Olympia ...	1	0
16, " 17, "	Prize List ...	3	6
	Models at Olympia.		
31, July 31, "	Blériot Flyer ...	2	0
	(Full page drawing.)		

Other back numbers (excepting Nos. 3 and 4, which are out of print), post free, $1\frac{1}{2}$ d. each, including descriptions and scale drawings of the Voisin (Nos. 33 and 34), Curtiss (No. 27), Cody (No. 34), Farman (No. 42), and Wright (No. 63) biplanes, the Santos Dumont (Nos. 40 and 41), Antoinette (Nos. 43 and 44), and Grade (No. 50) monoplanes, and of a full-size Wright glider (Nos. 38 and 39).

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